

# Global nutrition policy review:

*What does it take  
to scale up nutrition action?*

**Nutrition in community,  
WHO, 2014**

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Human Nutrition**

# Adult underweight and overweight:

- defined by the body mass index (BMI): a simple index of weight-to-height.
- BMI is age-independent for adult populations and is the same for both genders.
- It is defined as the weight in kilograms divided by the square of the height in metres ( $\text{kg}/\text{m}^2$ ).
- A BMI of  $< 17.0$  indicates moderate and severe thinness,  $< 18.5$  indicates underweight,  $18.5\text{--}24.9$  indicates normal weight,  $\geq 25.0$  indicates overweight and  $\geq 30.0$  indicates obesity.

**Severe acute malnutrition:** severe wasting (weight-for-height  $< -3$  standard deviations) or the presence of bilateral pitting oedema. In children aged 6–59 months, an arm circumference of  $< 115$  mm is indicative of severe acute malnutrition.

**Undernutrition:** a situation in which the body's requirements are not met, due to under-consumption, or to impaired absorption and use of nutrients. Undernutrition commonly refers to a deficit in energy intake, but can also refer to deficiencies of specific nutrients, and can be either acute or chronic.



2014



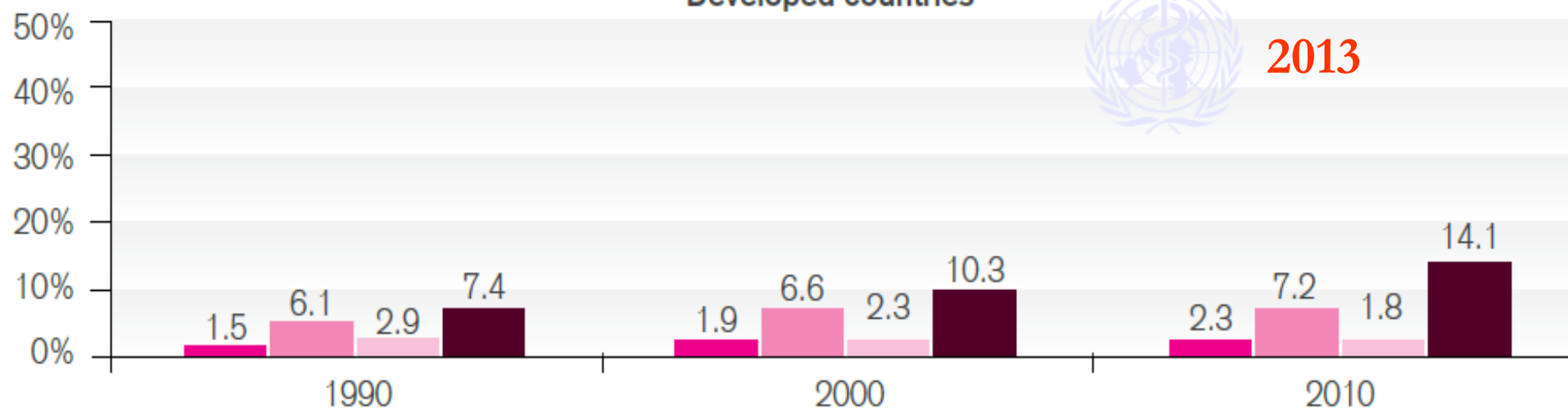
2013

# Current global nutrition challenges

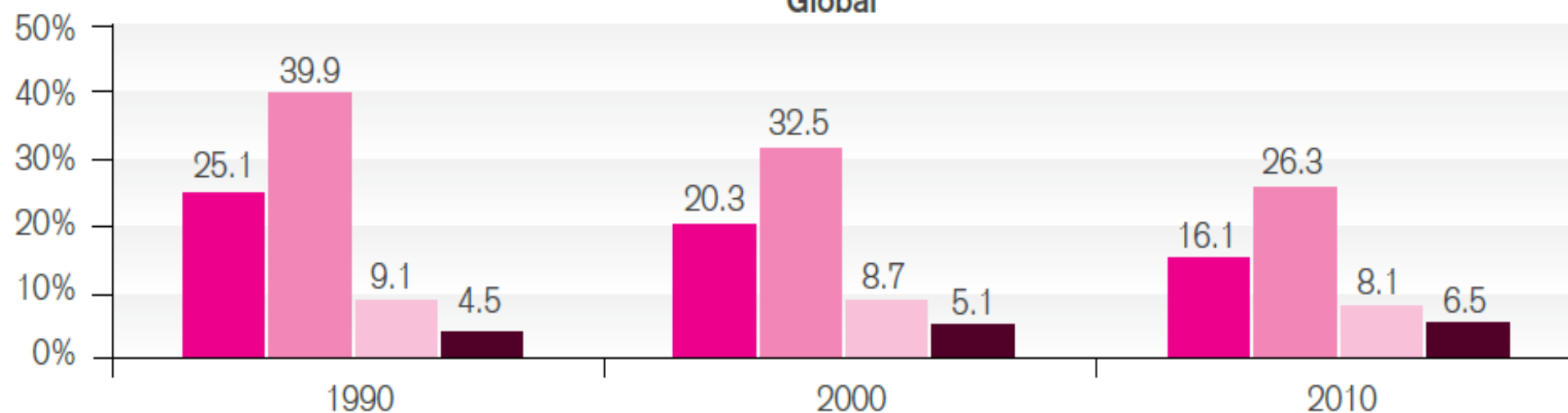
## Developed countries



2013



## Global



Underweight

Stunting

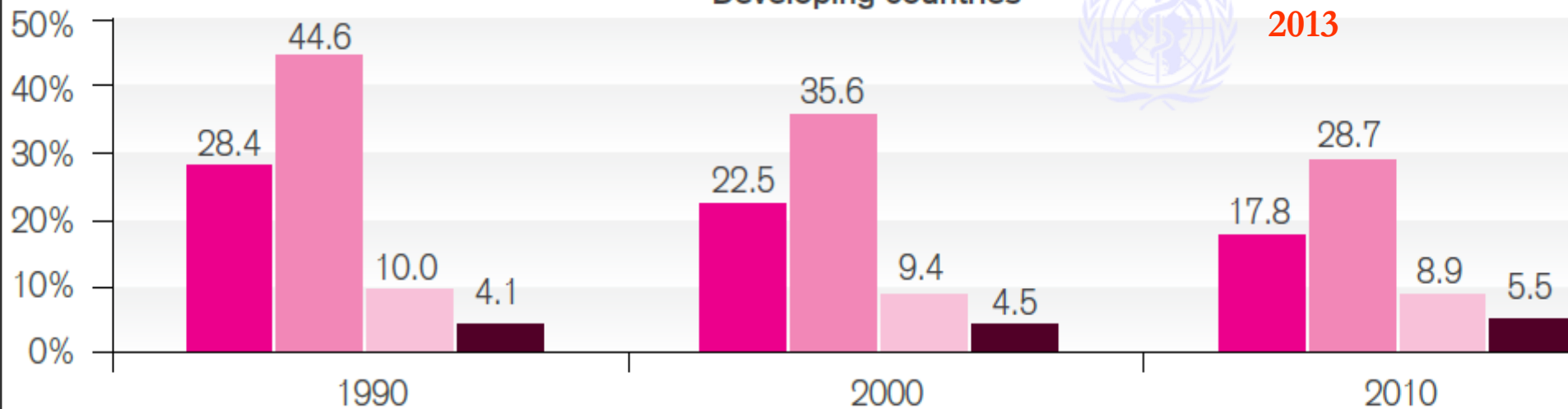
Wasting

Overweight

### Developing countries



2013



### Developed countries

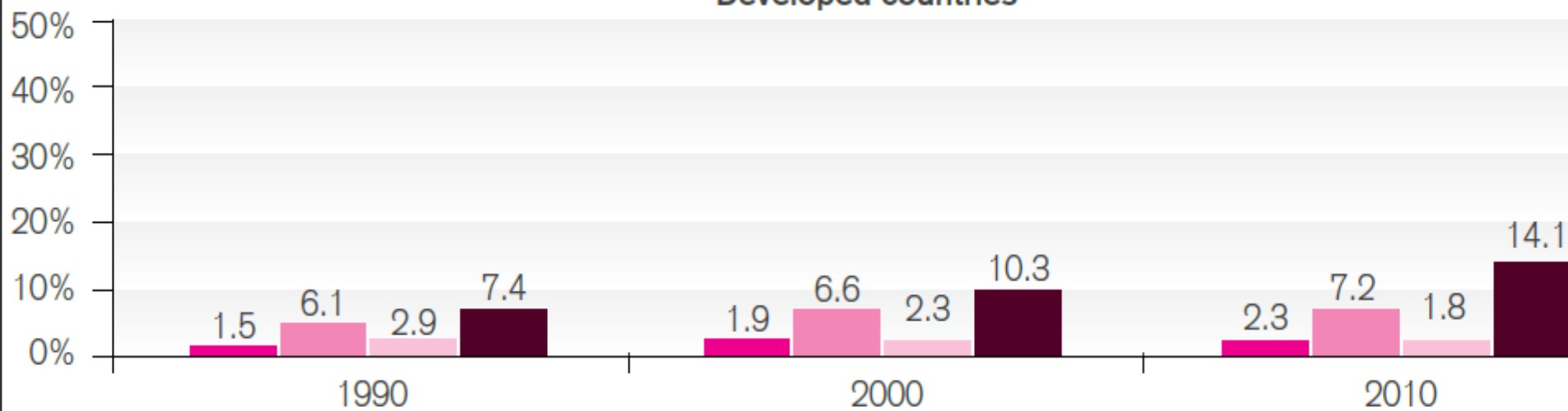


Figure 3. Global and regional prevalences of stunting, underweight, wasting and overweight based on the WHO standards for 1990, 2000 and 2010 by UN region.  
From UNICEF, WHO & World Bank (2012)

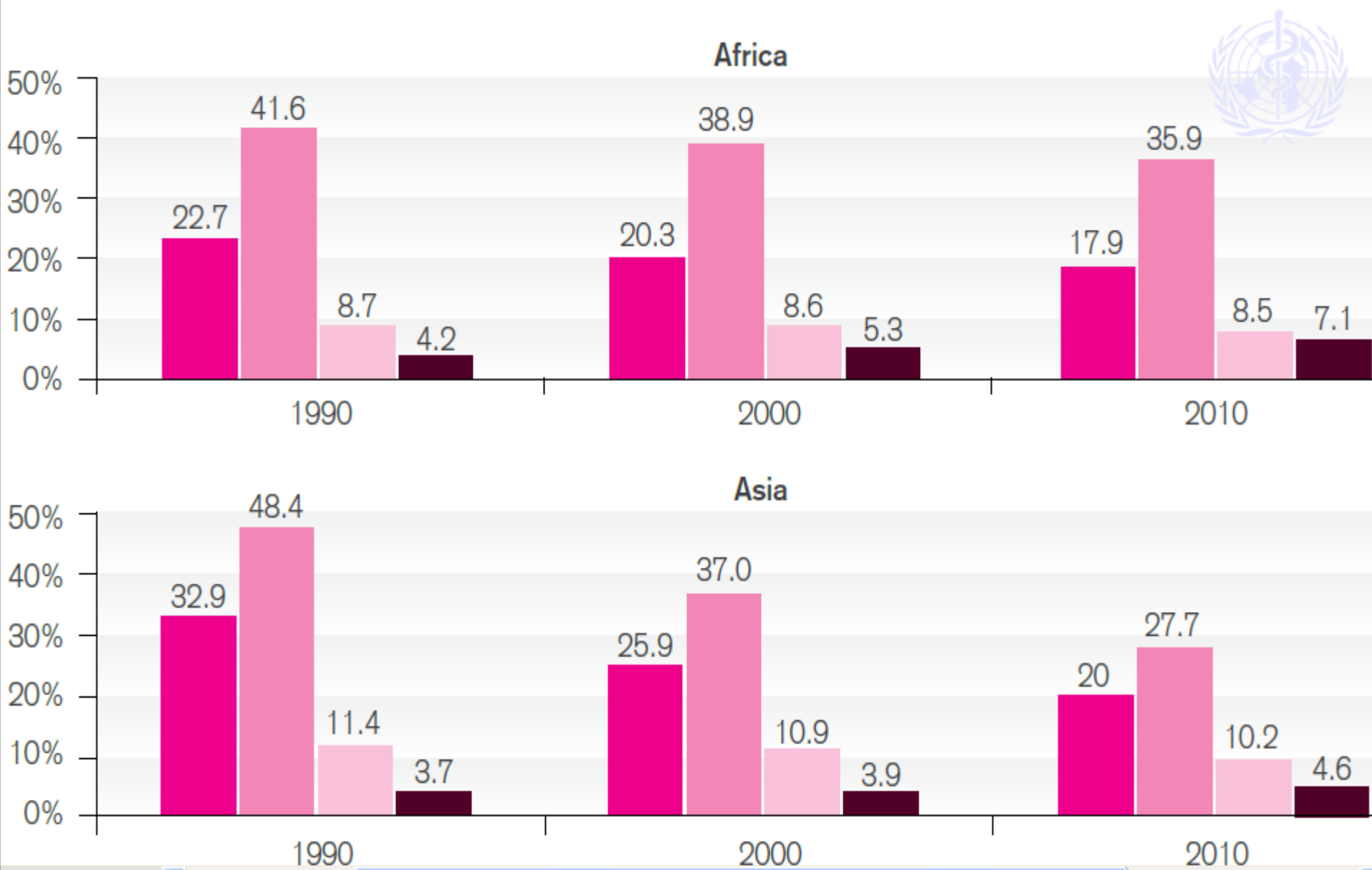
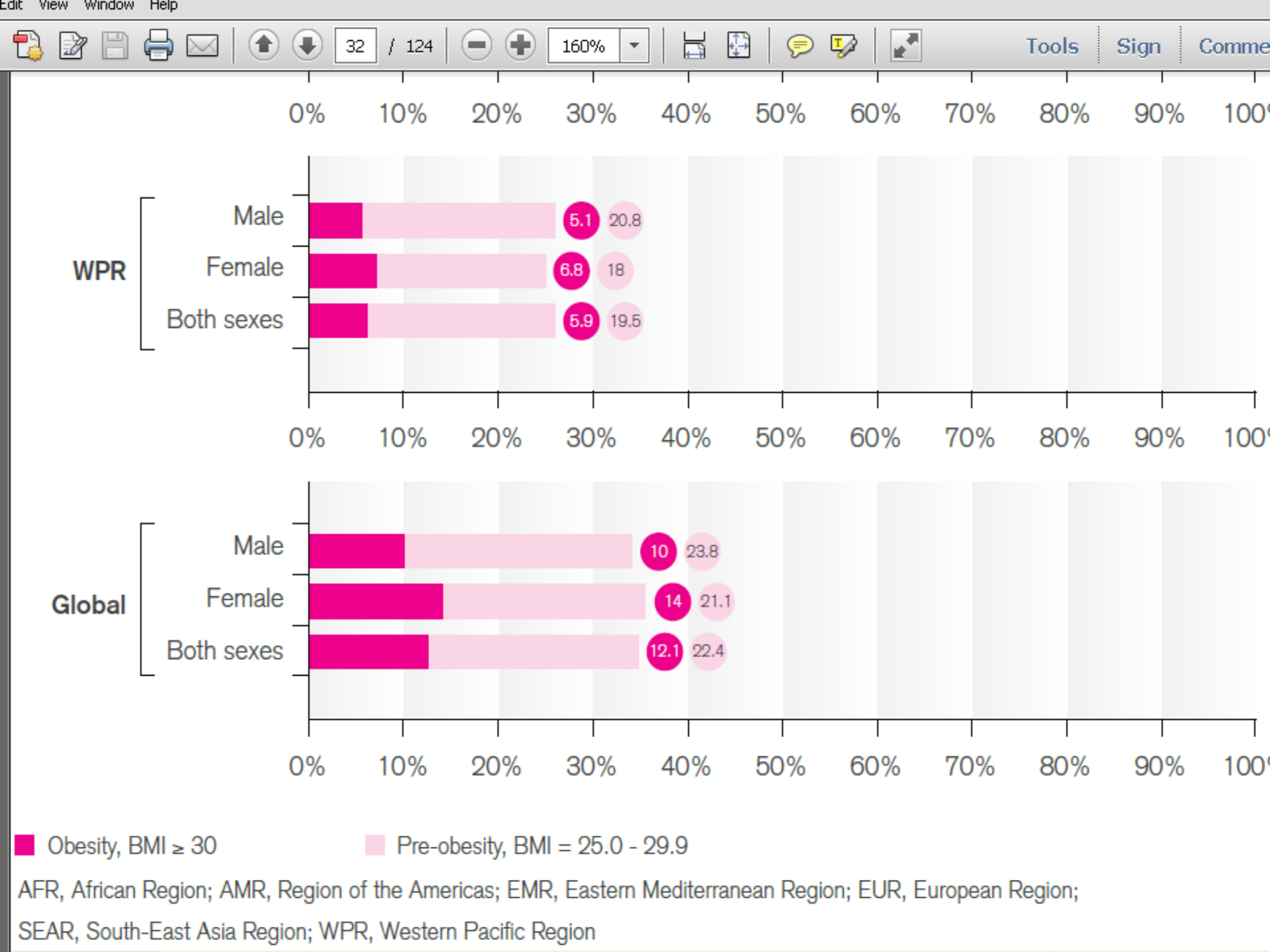


Figure 4. Trends in low birth weight by UN region, 1980–2000.  
From UNSCN (2010)

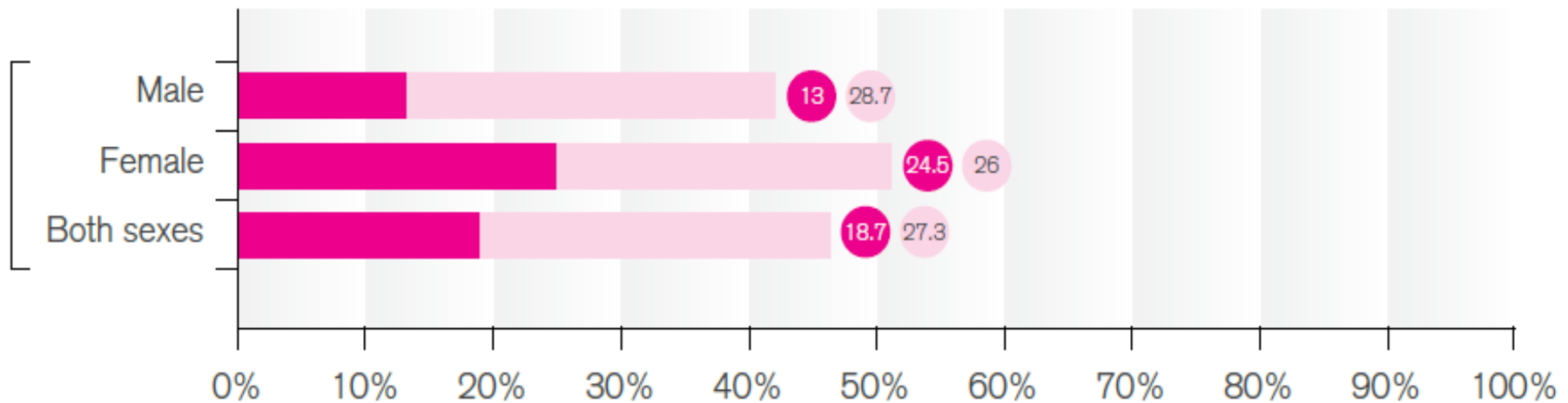




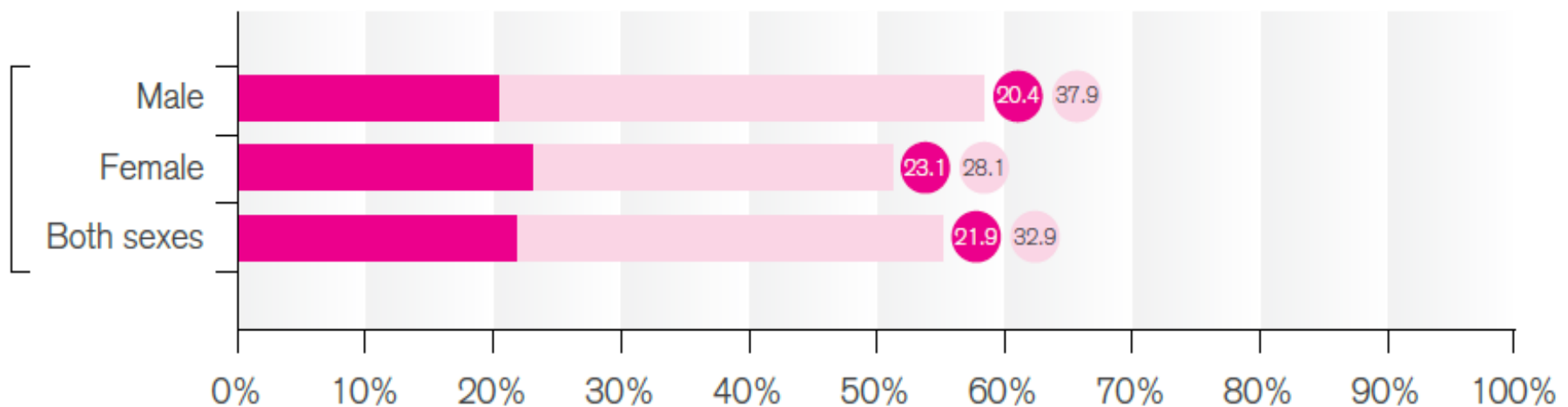




EMR



EUR



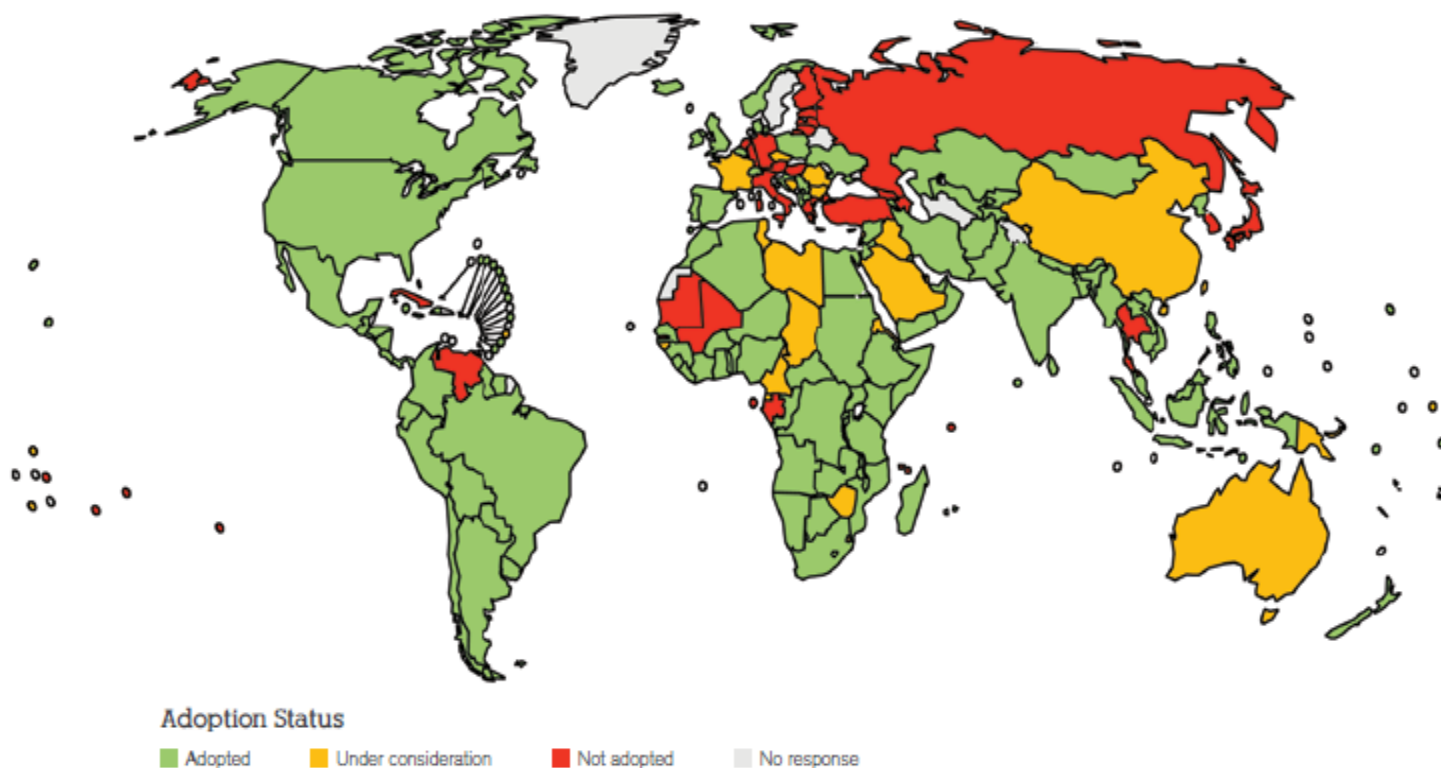


#### Box 7.

#### Adoption of WHO Child Growth Standards

The anthropometric indicators weight for age, height for age, weight for height and body mass index for age, can be used to screen and monitor malnutrition in children, to detect underweight, stunting, wasting and overweight. World Health Assembly resolution WHA63.23 urged WHO Member States to implement the WHO Child Growth Standards, by fully integrating them into child health programmes. The standards were launched in April 2006 and, by April 2011, had been adopted by 125 countries (nationally, or subnationally in decentralized countries), and were at various stages of implementation (Figure 26).

Figure 26. Countries that have adopted the WHO standards for child growth (April 2011).  
From de Onis et al. (2012)

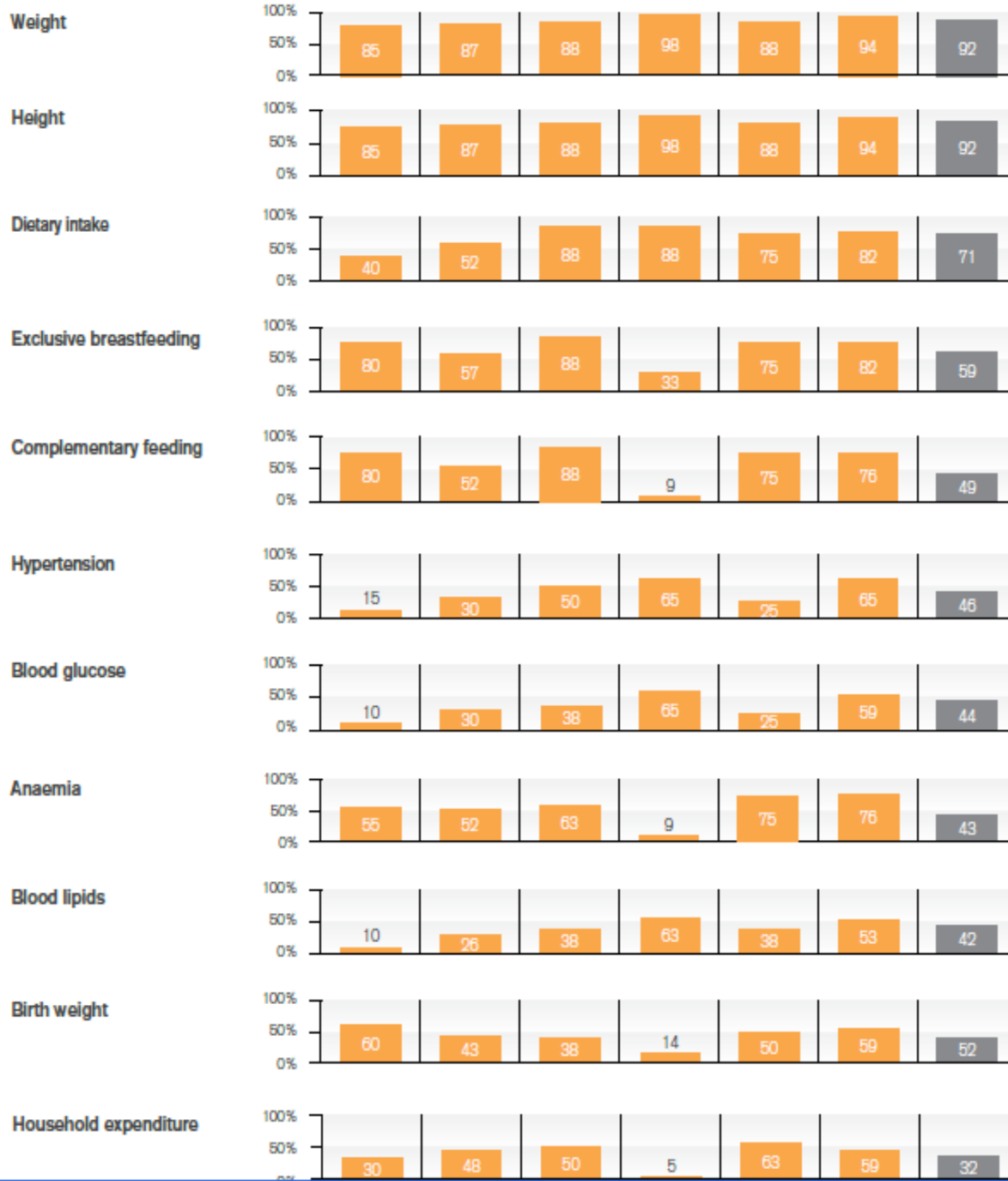


# Nutrition Surveillance

### 3.3.5 Nutrition surveillance



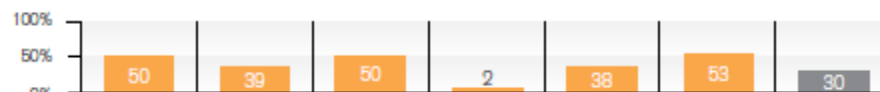
Most countries reported that national nutrition surveys had been conducted. The Review considered 426 surveys in 109 of the 119 countries that responded to Module 1 (Figure 25). Weight and height were measured in most countries. Dietary intake was measured in national surveys in at least 75% of countries in the Eastern Mediterranean Region, the European Region, the South-East Asia Region and the Western Pacific Region, but in about 50% or less of the countries in the African Region and the Region of the Americas. Exclusive breastfeeding and complementary feeding were assessed in national surveys in at least 75% of countries in the African Region, the Eastern Mediterranean Region, the South-East Asia Region and the Western Pacific Region. Anaemia was measured in at least 75% of countries in the South-East Asia Region and the Western Pacific Region. Blood pressure, blood lipids and blood glucose were most often measured in countries in the European Region and the Western Pacific Region. Anaemia and iron status were the indicators related to vitamin or mineral malnutrition status that were most commonly measured in national surveys; countries in the European Region were less likely to measure vitamin and mineral status indicators in national surveys, except for zinc.



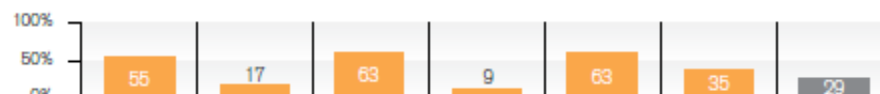


AFR (n=20)	AMR (n=23)	EMR (n=8)	EUR (n=43)	SEAR (n=8)	WPR (n=17)	Total (n=119)
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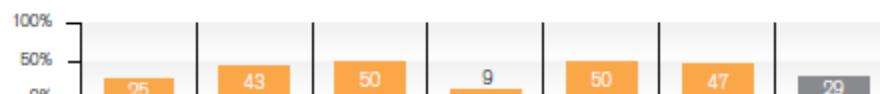
AMR, Region of the Americas;  
EMR, Eastern Mediterranean Region;  
EUR, European Region;  
SEAR, South-East Asia Region;  
WPR, Western Pacific Region



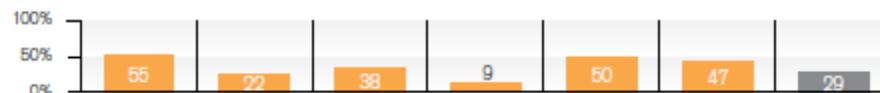
**Iron status**



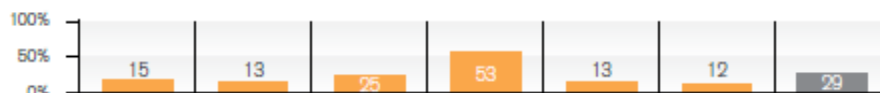
**Iodine status**



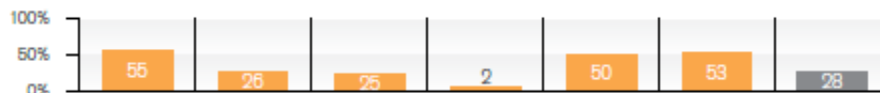
**Food supply**



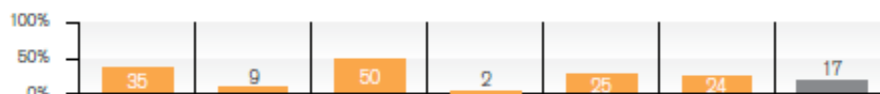
**Vitamin A status**



**Zinc status**



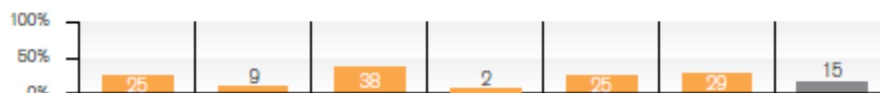
**Supplementation practices**



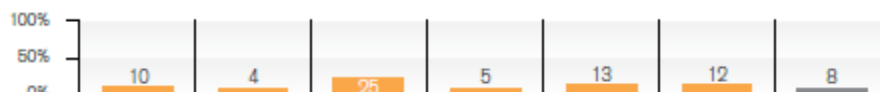
**Fortification monitoring**



**Bilateral pitting oedema**



**Folic acid status**



**Vitamin D status**

**Figure 27. Proportions of countries reporting implementation of interventions to improve maternal, infant and young child nutrition, by WHO region**

AFR, African Region;  
AMR, Region of the Americas;  
EMR, Eastern Mediterranean Region;  
EUR, European Region;  
SEAR, South-East Asia Region;  
WPR, Western Pacific Region

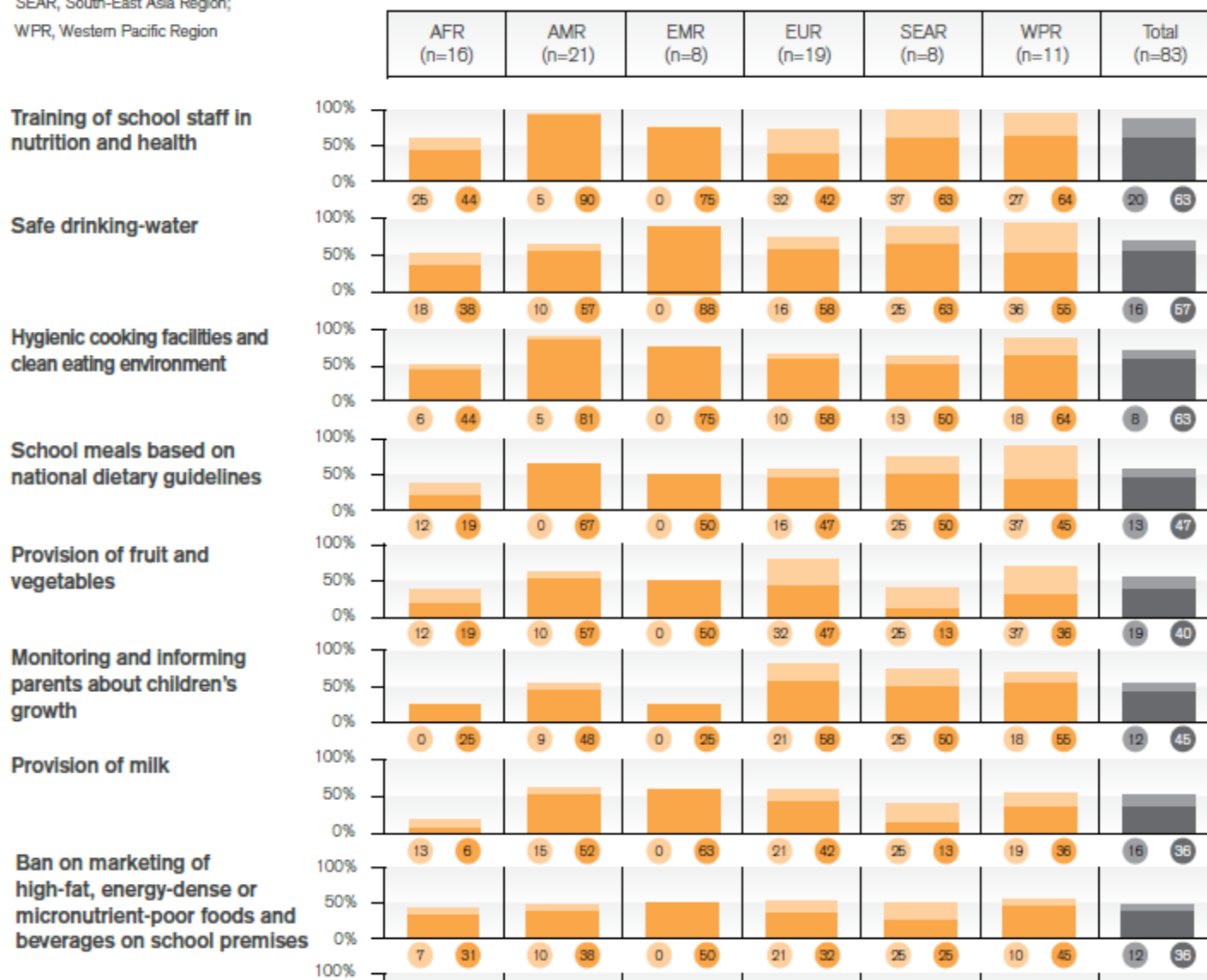






AFR, African Region;  
AMR, Region of the Americas;  
EMR, Eastern Mediterranean Region;  
EUR, European Region;  
SEAR, South-East Asia Region;  
WPR, Western Pacific Region

**Figure 30. Proportions of countries reporting school activities relevant to nutrition, by WHO region**





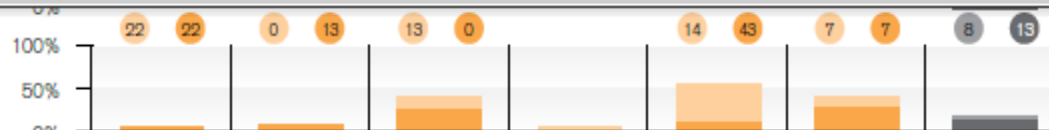
AFR, African Region;  
AMR, Region of the Americas;  
EMR, Eastern Mediterranean Region;  
EUR, European Region;  
SEAR, South-East Asia Region;  
WPR, Western Pacific Region

**Figure 31. Proportions of countries reporting vitamin and mineral supplementation programmes, by WHO region**

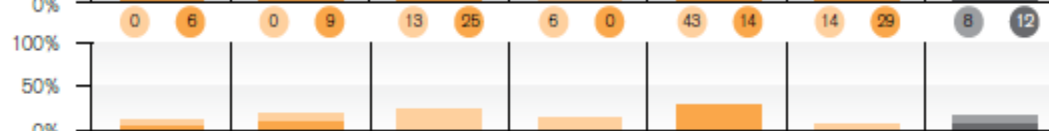




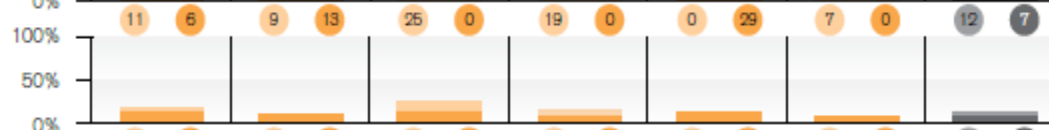
Multiple micronutrients for children



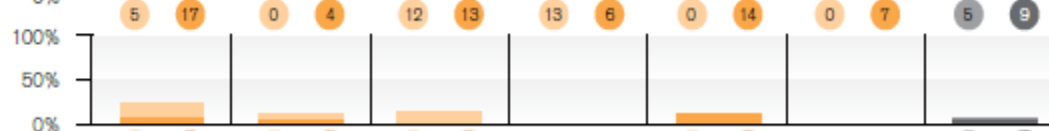
Calcium for pregnant women



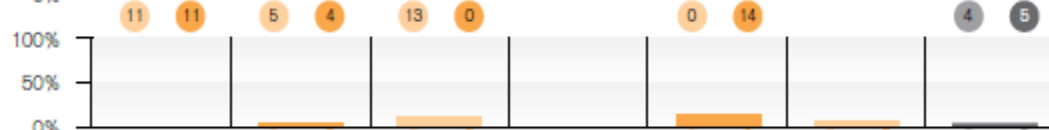
Iodine for pregnant women or all women



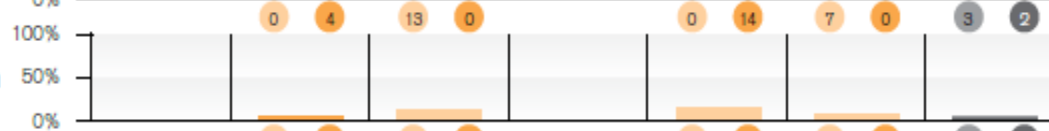
Iodine for children



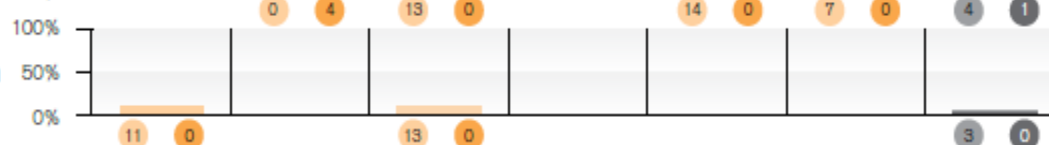
Vitamin A for pregnant women



Multiple micronutrient powders for home fortification of foods for children



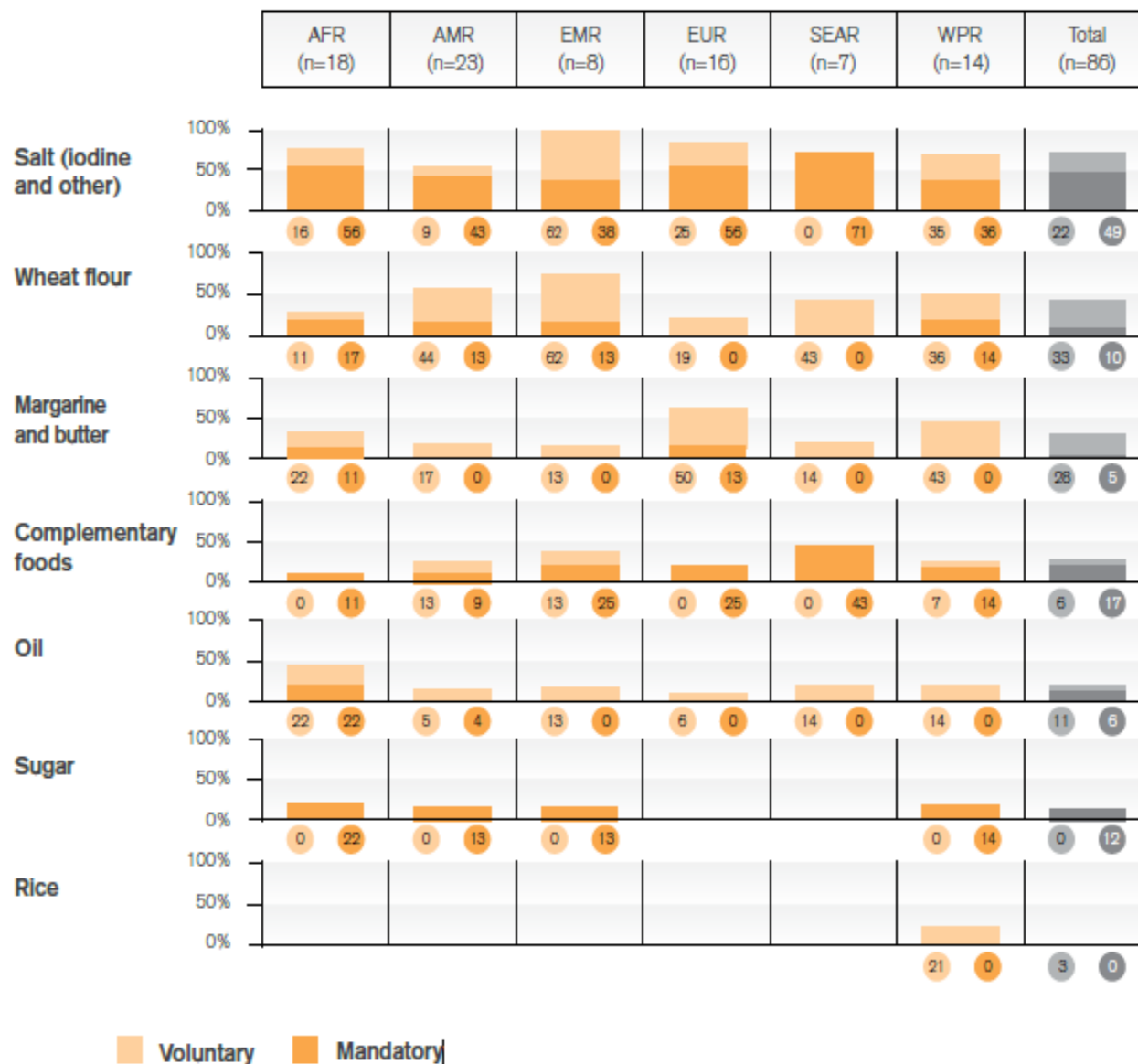
Multiple micronutrient powders for home fortification of foods for pregnant women



Implementation at subnational scale

Implementation at national scale

**Figure 33. Proportions of countries reporting fortification of food products by WHO region**



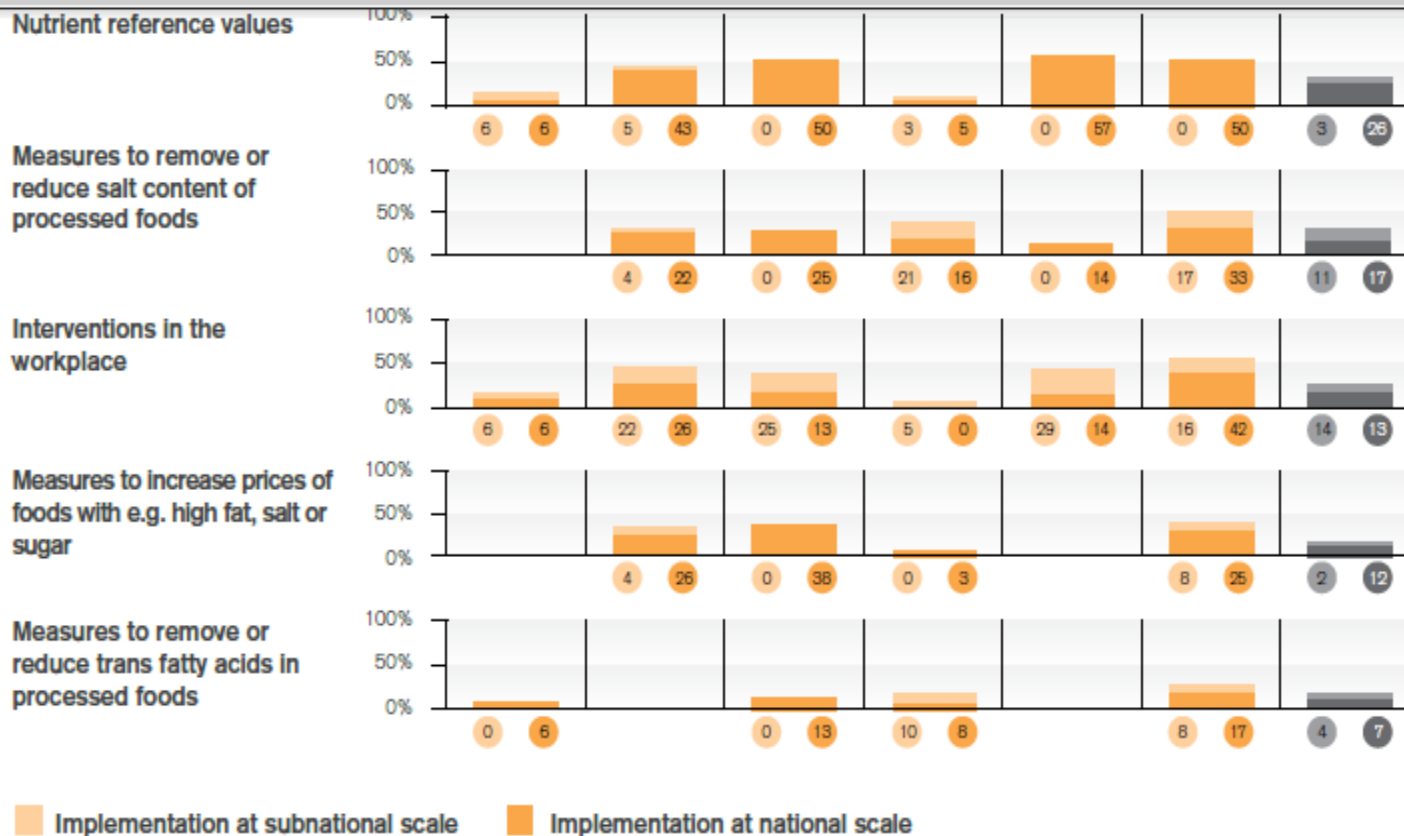
AFR, African Region; AMR, Region of the Americas; EMR, Eastern Mediterranean Region; EUR, European Region; SEAR, South-East Asia Region; WPR, Western Pacific Region



AFR, African Region;  
AMR, Region of the Americas;  
EMR, Eastern Mediterranean Region;  
EUR, European Region;  
SEAR, South-East Asia Region;  
WPR, Western Pacific Region

**Figure 34. Proportions of countries reporting programmes relevant to obesity and diet-related NCDs, by WHO region**





**Table 3. Distribution of four nutrition problems in 54 countries responding to the complete questionnaire, by WHO region**



	WHO region						
School level	AFR (n=13)	AMR (n=19)	EMR (n=4)	EUR (n=5)	SEAR (n=6)	WPR (n=7)	Total (n=54)
<b>Stunting</b>							
<i>High levels</i>	11	5	2	0	4	5	27
<i>Low levels</i>	2	8	2	1	2	1	16
<i>No data</i>	0	6	0	4	0	1	11
<b>LBW/maternal undernutrition</b>							
<i>High levels</i>	11	6	1	1	5	3	27
<i>Low levels</i>	1	12	3	4	1	4	25
<i>No data</i>	1	1	0	0	0	0	2
<b>Women's obesity</b>							
<i>High levels</i>	7	12	4	5	0	3	31
<i>Low levels</i>	5	0	0	0	1	2	8
<i>No data</i>	1	7	0	0	5	2	15
<b>Double burden of women's obesity and child stunting</b>							
<i>High levels of both conditions</i>	6	5	2	0	0	2	15
<i>Low levels of at least one condition</i>	6	6	2	1	3	2	20
<i>No data</i>	1	8	0	4	3	3	19

AFR, African Region; AMR, Region of the Americas; EMR, Eastern Mediterranean Region; EUR, European Region; SEAR, South-East Asia Region; WPR, Western Pacific Region

**Table 4. Maternal, infant and young child nutrition interventions evaluated\***



	All contexts	Specific contexts**
<b>Maternal and birth outcomes</b>	Iron and folic acid supplementation Maternal multiple micronutrient supplementation Maternal iodine through iodization of salt Maternal calcium supplementation Interventions to reduce tobacco consumption or indoor air pollution	Maternal supplements of balanced energy and protein Maternal iodine supplements Maternal deworming in pregnancy Intermittent preventive treatment for malaria Insecticide-treated bednets
<b>Newborns and children</b>	Promotion of breastfeeding Behavioural change communication to improve complementary feeding Zinc supplementation Zinc in management of diarrhoea Vitamin A fortification or supplementation Universal salt iodization Hand-washing or other hygiene interventions Management of severe acute malnutrition	Neonatal vitamin A supplementation Delayed cord clamping Conditional cash transfer (with nutritional education) Deworming Iron fortification and supplementation Insecticide-treated bednets

\* Implementation at national or subnational scale of these interventions was evaluated on the basis of countries' responses to modules 1,

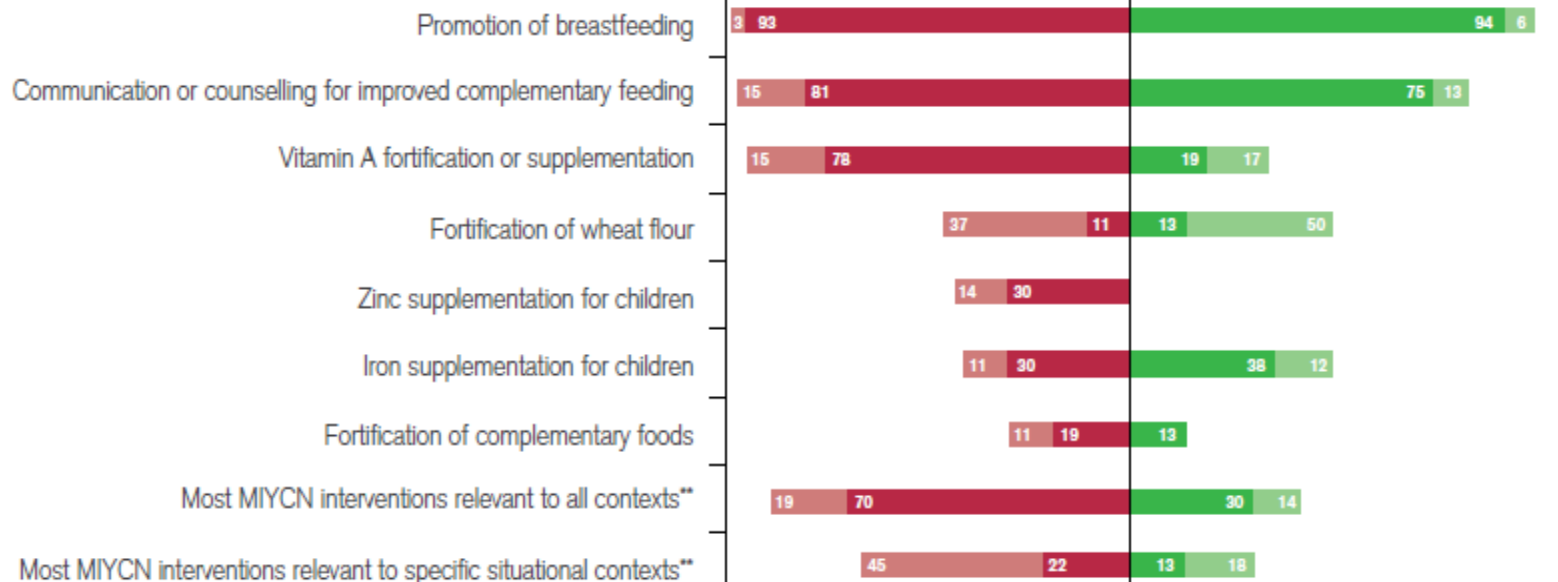


**Figure 36 Policies, coordination mechanisms and stakeholders, interventions and surveillance in countries with high and low levels of stunting. Data are presented as the percentage of total number of countries in each group.**

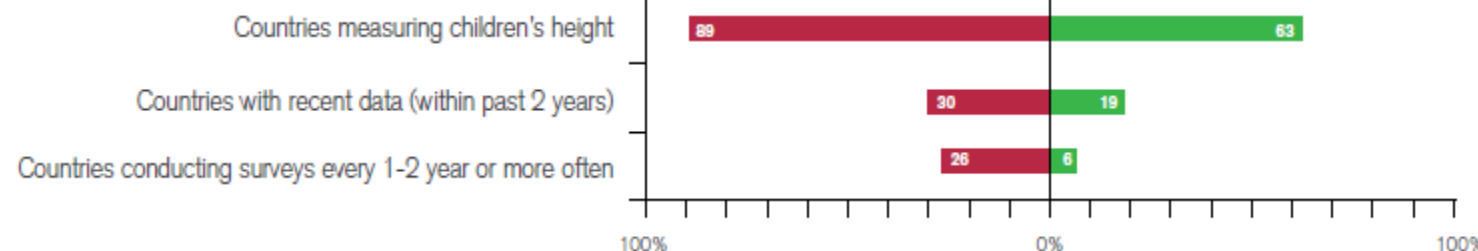


## Interventions being implemented by stakeholders\*

Countries implementing the following relevant interventions:



## Monitoring and surveillance



\* For interventions, the darker area indicates implementation at national scale, the lighter area indicates implementation at subnational scale, and the full bar implementation at any scale (national or subnational).

\*\* This refers to a majority of maternal, infant and young child nutrition (MIYCN) interventions relevant to please all contexts or in specific situational contexts as identified by Bhutta et al. (2008) and listed in Table 4.

## Interventions being implemented by stakeholders\*

Countries implementing the following relevant interventions:

Iron and folic acid supplementation for women

Vitamin A supplementation for women

Fortification of wheat flour

Provision of maternal supplements of balanced energy and protein

Maternal deworming in pregnancy

Interventions to reduce maternal tobacco consumption or indoor air pollution

Preventive treatment of malaria in women

Promoting and implementation of delayed cord clamping

Most MIYCN interventions for maternal and birth outcomes (MBO) relevant to all contexts\*\*

Most MIYCN interventions for MBO relevant to specific situational contexts\*\*

## Monitoring and surveillance

Countries with surveys that measure BW and/or nutrition indicators among WRA

Anaemia

Iron status

Folic acid status

Countries with recent data (within past 2 years)

Countries conducting surveys every 1-2 year or more often

100%

0%

100%

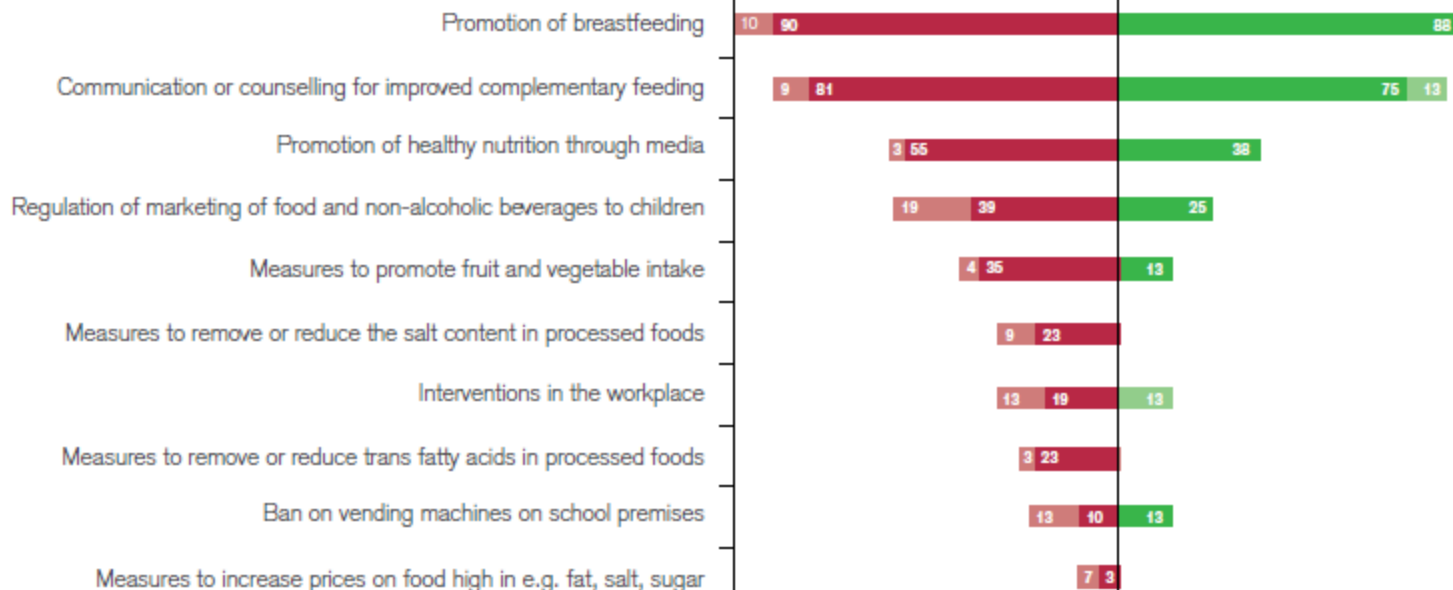
\* For interventions, the darker area indicates implementation at national scale, the lighter area indicates implementation at subnational scale, and the full bar implementation at any scale (national or subnational).

**Figure 38 Policies, coordination mechanisms and stakeholders, interventions and surveillance in countries with high and low levels of women's obesity. Data are presented as the percentage of total number of countries in each group**

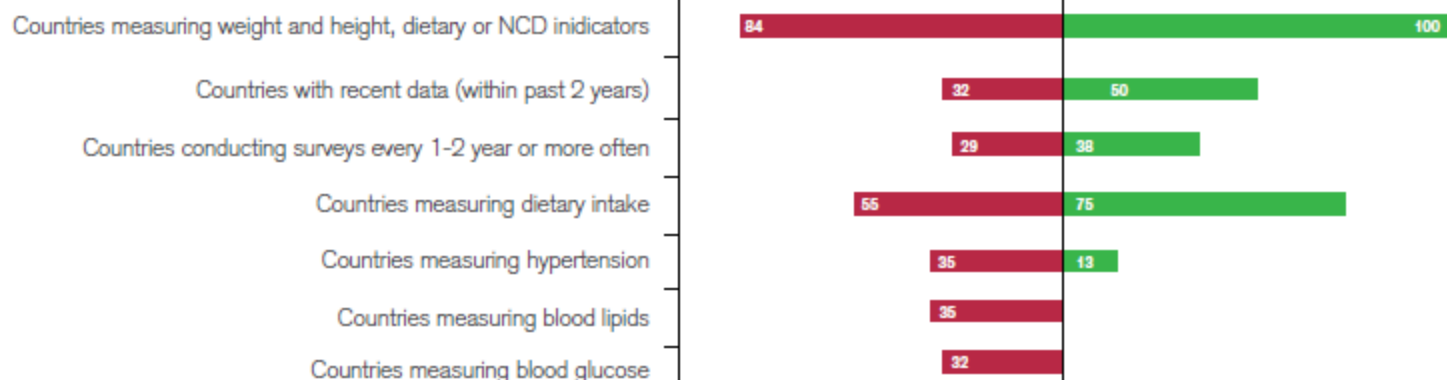


## Interventions being implemented by stakeholders\*

Countries implementing the following relevant interventions:



## Monitoring and surveillance



100%

0%

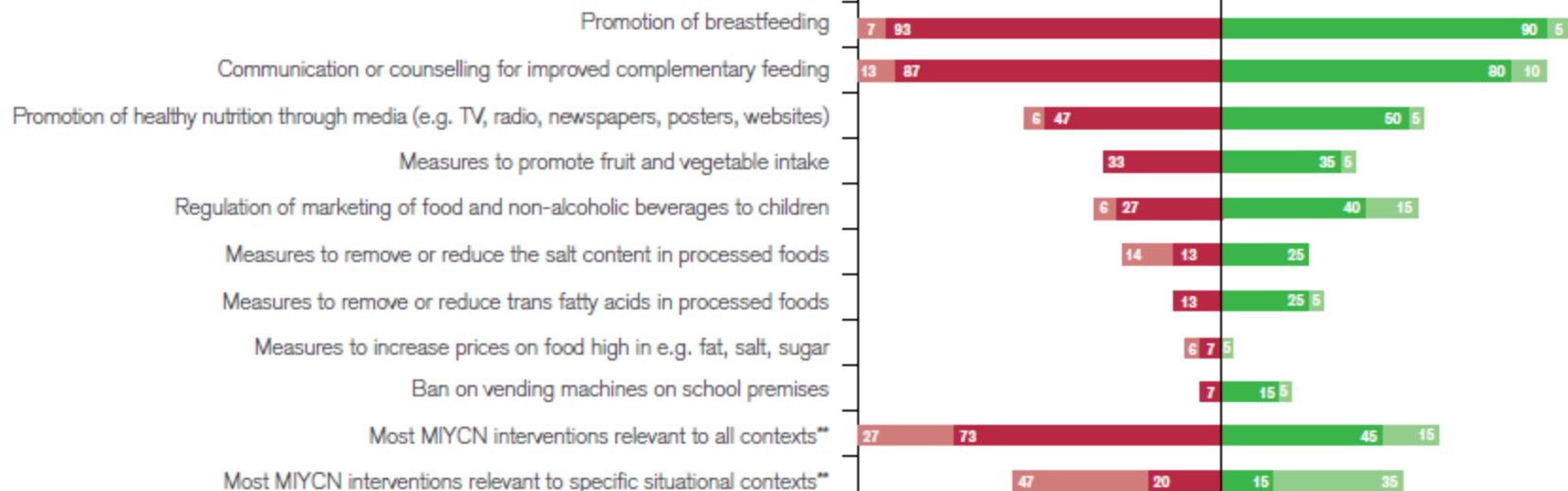
100%

**Figure 39 Policies, coordination mechanisms and stakeholders, interventions and surveillance in countries with and without a double burden of malnutrition (coexistence of child stunting and women's obesity). Data are presented as the percentage of total number of countries in each group.**



## Interventions being implemented by stakeholders\*

Countries implementing the following relevant interventions:



## Monitoring and surveillance

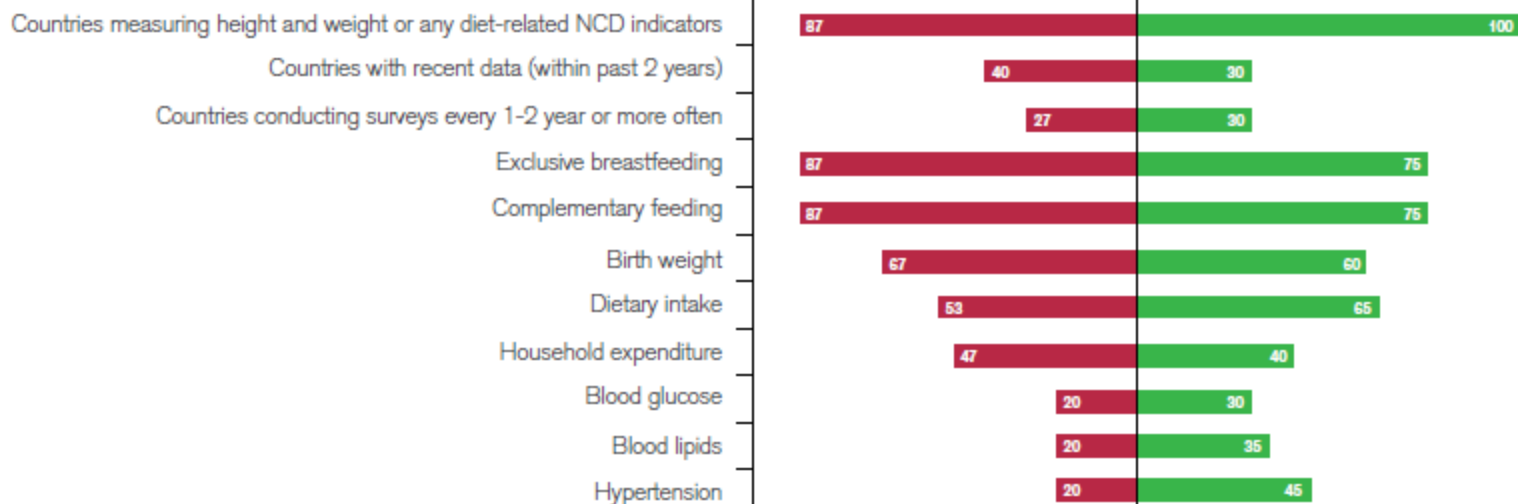
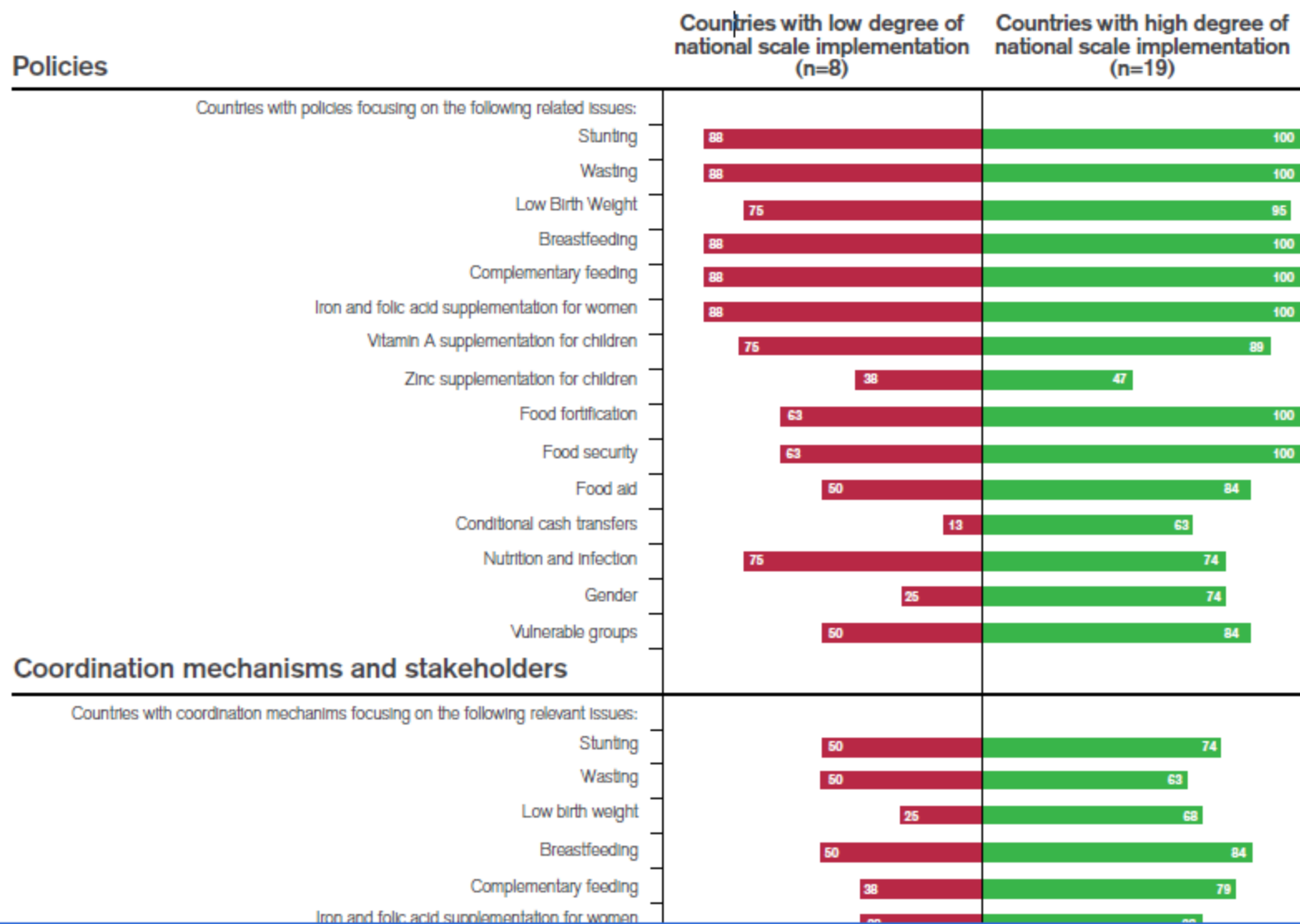


Figure 40 Policies, coordination mechanisms, interventions and surveillance in high burden stunting countries with high and low degree of national scale implementation of key MICYN interventions\*. Data are presented as the percentage of total number of countries in each group.





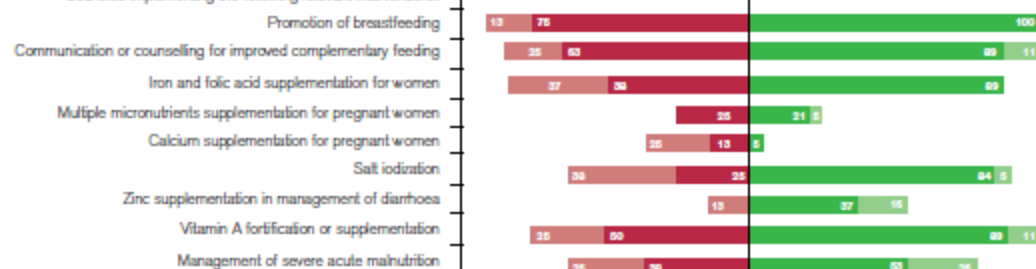
## Coordination mechanisms and stakeholders

Countries with coordination mechanisms focusing on the following relevant issues:



## Interventions being implemented by stakeholders\*

Countries implementing the following relevant interventions:



## Monitoring and surveillance

Countries with national surveys  
Countries with recent data (within past 2 years)  
Countries conducting surveys every 1-2 year or more often



\* For interventions, the darker area indicates implementation at national scale, the lighter area indicates implementation at subnational scale, and the full bar implementation at any scale (national or subnational).